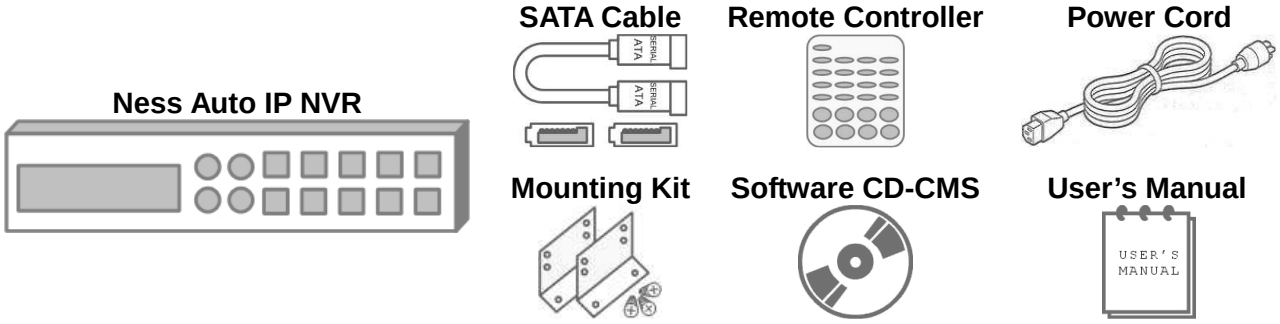
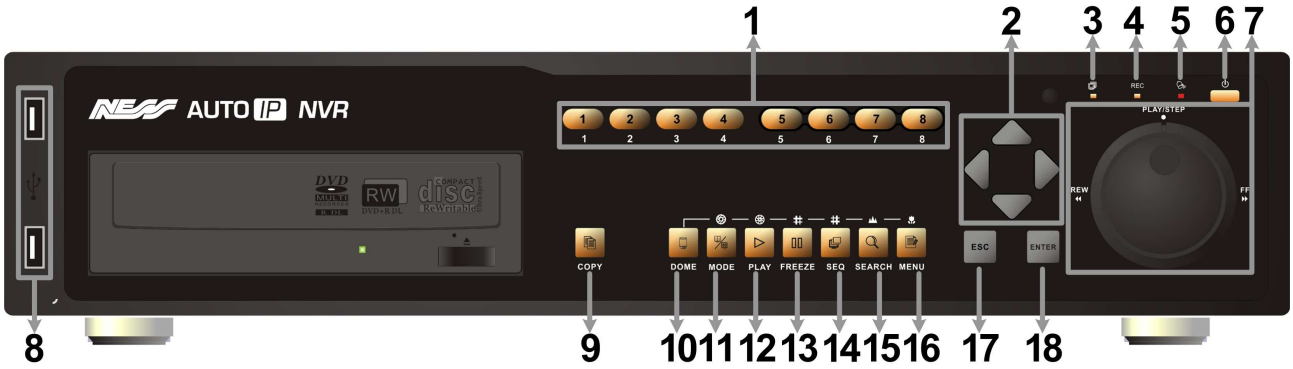
Ness Auto IP NVR
Setup Guide

Package Content

Inspect the packaging carton. Make sure the **Ness Auto IP NVR** is properly delivered. Remove all items from the box and make sure the box contains the following items.



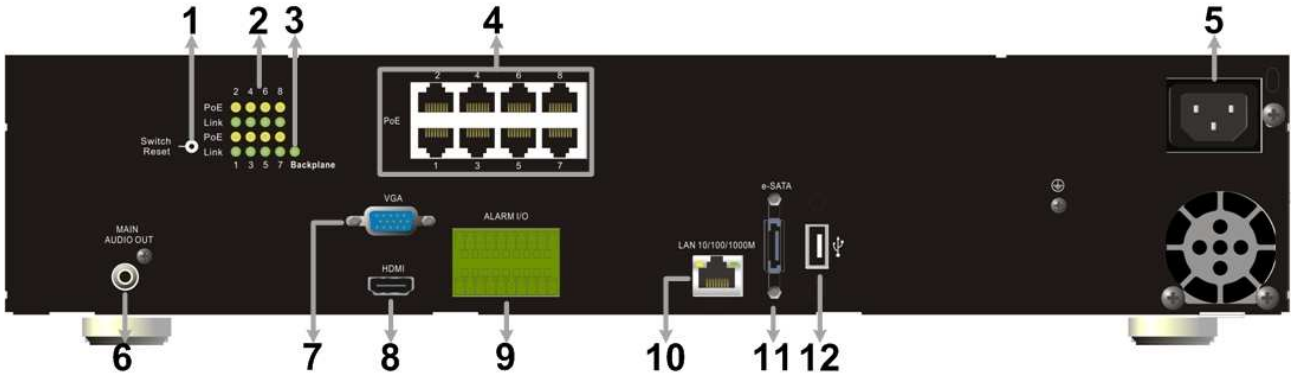
Front Panel



1	**Channels**	1. In Live and Playback modes, press any key to view the corresponding video in full-screen. 2. In input interface, 1~10 can be used for direct input of numbers 0~9. 3. In Dome Camera Control mode, 1 is for entering the Set/ Go preset menu; 11~16 is for quick access of preset points 1~6.
2	**Direction Keys**	1. In Zoom mode, these keys function as normal direction keys. 2. In the OSD setup menu, the direction keys are used to move the cursor to previous or next fields. To change the value in the selected field, press UP / DOWN keys.
3	**Network LED**	It lights up when network is connected. In addition, it blinks when data is being transmitted via the network.
4	**Record LED**	It blinks when videos are being recorded.
5	**Alarm LED**	It lights up when an alarm is triggered.
6	**Power Switch**	1. Press this switch to power on the NVR. The LED will be lighten up. 2. Press and hold this key to quick shutdown the NVR. The LED will blink when the power source is still available.
7	**Shuttle/ Jog**	This is used to control playback operations.
8	**USB 2.0 Ports**	The USB 2.0 ports allow users to connect an external USB device to the unit, such as a USB ThumbDrive® or a USB mouse.
9	**COPY**	This key is also used for marking time in quick video export function.
10	**DOME**	Press this key to enter Dome Camera Control mode.

11	**MODE**	Press this key to view in full-screen or multiple window modes.
12	**PLAY**	Press once to start the playback of recorded video. Press again to exit.
13	**FREEZE**	Press this key to freeze the current viewing screen.
14	**SEQ**	Press this key to start automatic sequence display of cameras.
15	**SEARCH**	Press this key to search recorded video by date/time or event.
16	**MENU**	Press this key to enter the OSD setup menu.
17	**ESC**	Press this key to cancel or exit from certain control mode.
18	**ZOOM/ENTER**	1. In OSD menu or selection interface, press these key to make the selection or save settings. 2. In live full-screen viewing mode, press this key to view a 2× zoom image; press it again to return.

Rear Panel

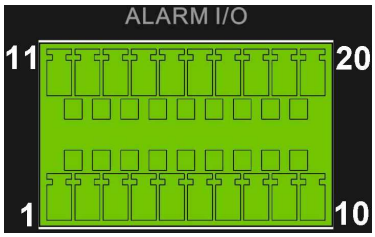


1	**PoE Switch Reset**	This is for reset of the PoE switch.
2	**LED Indication**	Each IP camera has two corresponding LEDs: 1. The lightened orange LED represents the IP camera is connected and power is supplied via PoE. When the LED is off, either the power is separately connected or the IP camera is not connected. 2. The blinking green LEDs represents data transmission goes from the IP cameras to the NVS. When the LED is not on, that means the IP camera is not connected.
3	**Backplane**	This LED will blink to indicate there is data transmission between the PoE board and the Main board.
4	**PoE Ports**	The optional PoE ports offer direct connections to four IP cameras. The IP cameras can be “plug and play” if the function is enabled in the OSD menu.
5	**Power Jack**	Connect the power supply cord shipped with the NVR. Use of other power supply cords may cause overloading.
6	**Main Monitor Audio Out**	A RCA connector is provided to output audio associated with the main monitor.
7	**Main Monitor (Digital Output)**	A digital output connector is provided for connection to a displaying device that transfers data digitally to show the best video quality.
8	**Main Monitor (VGA)**	A VGA output connector is offered for connecting to a VGA main monitor.
9	**Alarm I/O & RS-485**	The NVR provides alarm I/O and RS-485 ports that offer users the flexibility required to connect the unit to other devices. Refer

10	**LAN 10/100/1000M (RJ-45)**	The NVR is capable of networking and it allows the videos to be viewed over the LAN network or the Internet by using the Internet Explorer.
11	**e-SATA Port**	Users can connect an e-SATA storage device via this port.
12	**USB 2.0 Port**	The USB 2.0 port locates on the rear panel is for users to connect external USB devices to the unit, such as ThumbDrive® or a USB mouse.

NOTE: Currently, the "plug and play" function is only supported for specific models. Please contact the supplier for more information. Furthermore, the IP address of the IP cameras has to be set to default or static before connecting to the NVR. Otherwise the NVR will not be able to recognize the existence of the IP cameras.

Pin Definition of Alarm I/O & RS-485:



Pin	Definition	Pin	Definition	Pin	Definition	Pin	Definition
1	RS485 D+	**6**	Normal Open A	**11**	Alarm In 1	**16**	Alarm In 6
2	RS485 D−	**7**	Ground	**12**	Alarm In 2	**17**	Alarm In 7
3	Ground	**8**	Normal Close B	**13**	Alarm In 3	**18**	Alarm In 8
4	Normal Close A	**9**	Common Node B	**14**	Alarm In 4	**19**	N/A
5	Common Node A	**10**	Normal Open B	**15**	Alarm In 5	**20**	N/A

Power On the NVR

Please follow the proper power on procedures to avoid damaging the NVR.

- Connect all necessary components, e.g. monitor and cameras, before power on the NVR.
- Check the type of power source before plugging in the power cord to the NVR. The acceptable power input is between AC110V ~ AC240V.
- Press the power switch on the front panel to power on the NVR.

Select Viewing Mode:

- Press **MODE** button repeatedly to select preferred display mode. The available viewing modes are full-screen, 4-windows and 9-windows. Refer to the User's Manual for more detail.
- Press **FREEZE** to pause the current viewing image.

Basic Setup

Enter the OSD main menu and setup some basic configuration of the NVR. The basic configuration can be set via either the NVR or NVR**Remote**, the remote software.

Enter OSD Main Menu:

- Press **MENU** to enter the OSD main menu.
- Select the administrator account "**admin**" to login. Enter the preset password "**1234**".
- It is strongly suggested to change the password to prevent unauthorized access.

Date / Time Setting:

Follow steps below to setup date/time before the recording starts. Refer to the User's Manual for advanced setup of Time Sync function.

- Select <**Date/Time**> in System Setup menu.
- Select the date and time using **LEFT/RIGHT** keys; then adjust the value using **UP/DOWN** keys.
- The new date and time settings take effect after the changes are confirmed.

Language Setting:

If users wish to change language of the NVR system, follow the steps below.

- Select <**Language**> in System Setup menu and press **ENTER**.
- Press the **UP/DOWN** keys to select the desired language.

Network Setup

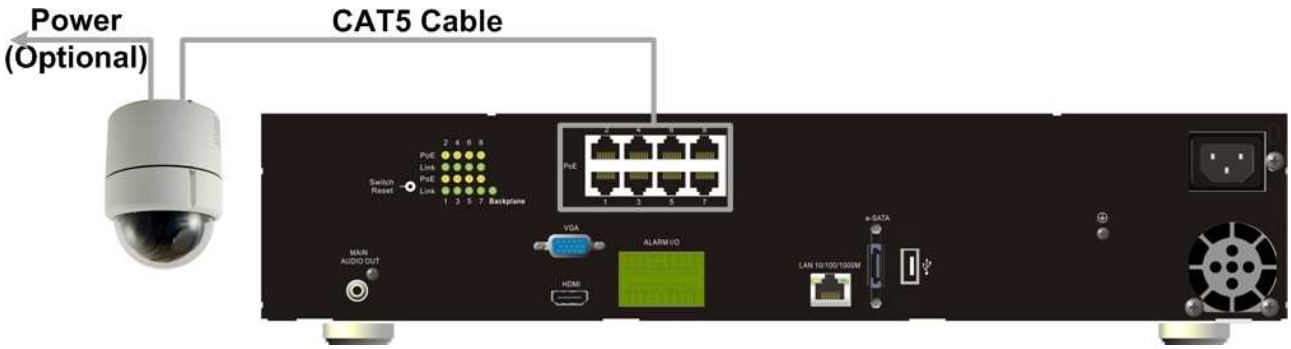
Configure the LAN setup for the NVR to properly function with Ethernet connection. The default ID of the **Ness Auto IP NVR** must be changed to avoid network conflicts.

- From OSD main menu, select <**System Setup**> → <**Network Setup**>, set the <**LAN Select**> item to <**LAN**> or <**PPPoE**> according to the network application, and enter <**LAN Setup**>.
- For DHCP users, set the DHCP to <**ON**>. The IP address, Netmask, Gateway and DNS settings are retrieved from network servers. DHCP is dynamic that the settings change from time to time.
- For Non-DHCP users, set the DHCP to <**OFF**>. IP address, Netmask, Gateway and DNS settings must be set. Please obtain the information from the network service provider.
- To change the IP address, Netmask, Gateway and DNS value, press **UP/DOWN** keys to move the cursor to the item. Use **LEFT/RIGHT** keys to access each section of the value and press **ENTER**, then change the value using **UP/DOWN** keys.
- PPPoE users must set the <**PPPoE Account**>, <**PPPoE Password**> and <**PPPoE Max Idle**> as well.
- When the settings are complete, press **ENTER** to confirm and save the settings; or **ESC** to abort.

Dome Camera Control

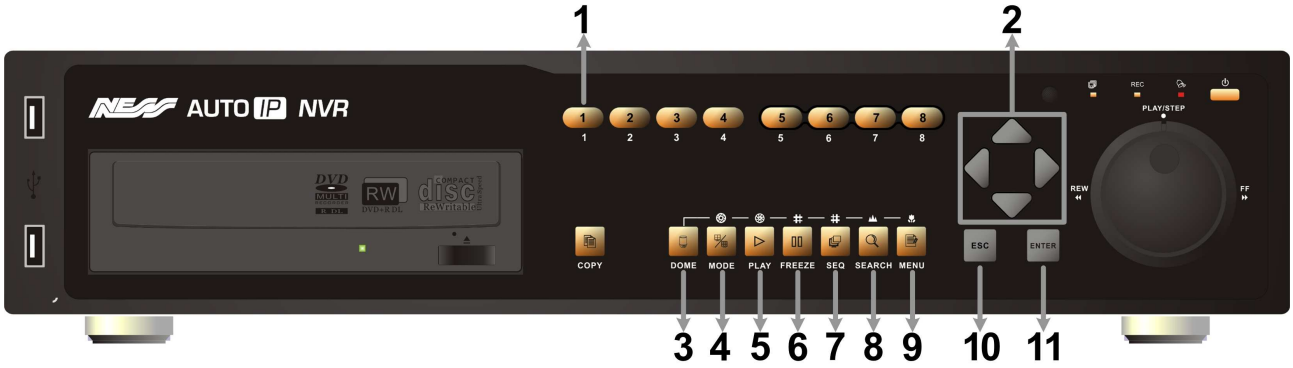
Dome Camera Connection:

Refer to the following figure. Connect the dome camera to any of the NVR's PoE port via a CAT5 cable. The PoE ports supply a total of 100W power source, with each port limited to 30W at most. If the connecting dome camera requires power exceeding the limited power source, please connect an additional power source.



NOTE: The 100W power is shared by all ports, but not equally shared. For example, if the first three ports used up to each port's maximum 30W and the fourth port used 10W, the remaining ports will not have power supply. Instead, they will just be network connection ports.

Control Buttons in Dome Camera Control Mode:



1	Set / Go Preset	**5**	Iris Open	**9**	Zoom Out
2	Go Presets 1~6	**6**	Iris Close	**10**	Zoom In
3	Pan / Tilt	**7**	Focus Far	**11**	ESC
4	Enter Dome Camera Control Mode	**8**	Focus Near	**12**	Enter / Auto

Basic Playback Operation

Search By Time:

- Press **SEARCH** to enter the Search menu.
- Move the cursor to “From” and press **ENTER** will start playing recorded video from the specified “From” time.
- Move the cursor to “End” and press **ENTER** will start playing recorded video from the specified “End” time.
- Move the cursor to “Select” and press **LEFT**/**RIGHT** to choose date/ time. Press **ENTER** and adjust the values by **UP/DOWN** keys. Press **ENTER** again to confirm or press **ESC** to abort.
- Move the cursor to <**Begin Playback**> and press **ENTER** to start playing back recorded video of the selected time. Press **PLAY/STOP** again to return to live video.

NOTE: If there is no available recorded video that matches the specified time and date, the unit starts to playback from the next available video.

Calendar Search:

- Press **SEARCH** to enter the Search menu.
- Move the cursor to <**Calendar Search**> and press **ENTER**. A calendar will show up.
- Select any date shown in underlined font, which means recording data are available. The table shown on the left will display available videos of each channel within the selected date.
- The videos are classified into four categories: **Normal**, **Motion**, **Alarm In** and **Video Loss**, shown as four different tabs on the top.
- Then select a preferred time from the time bar. Alternatively, specify the values of date/ hour/ minute/ second under <**Select**> on the right.
- The <**From**> and <**End**> buttons allows users to playback video from the beginning or end of the database.
- Select <**Begin Playback**> and press ENTER to start playing back selected video.

Search by Event:

- Press **SEARCH** to enter the Search menu.
- To search event video that was recorded on a specific camera, use **LEFT/RIGHT** keys to move the cursor and press **ENTER** to select or de-select a channel.
- Move the cursor to <**Event List**> and press **ENTER** to list the event video of the selected channels.
- The list displays each event by date, time, triggered camera and alarm type. The latest recorded event video will be listed on the top. To exit the event list, press **ESC**.
- Use **UP/DOWN** keys to scroll through the Event List. Press the buttons at below to go to previous/next pages. Press **ENTER** to playback the selected event record.

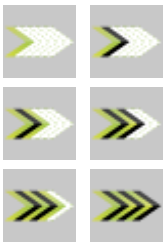
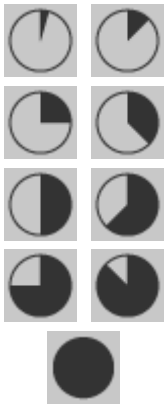
NOTE: The event list displays only the first 1024 events; as some events are deleted, others are displayed.

Playback Controls:

Button	Description
LEFT	The button is for rewinding the recorded video while playing back. Press the button repeatedly to increase the speed of reverse playback by 1x, 2x, 4x, 8x, 16x, or 32x.
RIGHT	The button is used to play the recorded video fast forward. Press the button repeatedly to increase the speed of forward playback by 1x, 2x, 4x, 8x, 16x, or 32x.
FREEZE	Press **FREEZE** to pause the playback video. When the recorded video is paused, press **LEFT**/**RIGHT** to resume playback video single step reverse/forward respectively. Press **FREEZE** again to continue playing video.
PLAY	Press to start the playback or to stop playing back video and return to live mode.

NVR Status Bar Icons

Icons that will be displayed in the status bar are listed in the following table with their descriptions.

Item	Icon	Description	Item	Icon	Description
1		Main Monitor	14		Quick Export
2		Call Monitor	15		Stamp A
3		Monitor Active / Inactive	16		Stamp B
4		Sequence	17		Lock
5		Record	18		Disk Error
6		Event Record	19		Disk Full
7		Freeze @ Live Mode	20		Disk Overheat
8		Dome Camera Control	21		No Disk
9		Zoom	22		Disk Almost Full
10		Forward Playback Speed: 1x, 2x, 4x, 8x, 16x, 32x	23		HDD Usage
11		Pause @ Playback mode	24		Guest
12		Backward Playback Speed: 1x, 2x, 4x, 8x, 16x, 32x	25		User's Authority Level
13		End of Video			

Connect the NVR via the Remote Software

Setup Requirements:

- Make sure the PC is connected to the Internet.
- Obtain IP address of the **Ness Auto IP NVR** .To check the NVR's IP address, press **MENU** on the front panel and select <**System Setup**> → <**Network Setup**> → <**LAN Setup**> → <**IP**> to check the IP.

NOTE: Make sure the IP address of the NVR is not set to "192.168.50.xxx". Otherwise network conflict will occur against the default IP of the built-in PoE hub.

Changing Internet Setting:

- Start the IE; select <**Tools**> from the main menu of the browser, then <**Internet Options**> and then click the <**Security**> tab.
- Select <**Trusted Sites**> and click <**Sites**> to specify its security setting.
- Uncheck "Require server verification (https:) for all sites in this zone". Type the IP address of the unit in field and click <**Add**> to add this website to the zone.
- In the Security Level area, click <**Custom Level**>. Under <**ActiveX controls and plug-ins**>, set all items to <**Enable**> or <**Prompt**>.
- Click <**OK**> to accept the settings and close the <**Security Settings**> screen.

Using the Remote Software:

- Start the IE and enter the IP address of the **Ness Auto IP NVR** in the address bar.
- The ActiveX controls and plug-ins dialog will show up twice for confirmation; click <**YES**> to accept ActiveX plug-ins. The NVR**Remote** plug-ins will be downloaded and installed on the PC automatically when the connection is successfully made.

NOTE: Do not enter any leading "0" characters in the address, for example, "192.068.080.006" should be entered "192.68.80.6".

NOTE: If the default trigger port 80 is changed into another one, take port 81 for example, users should enter the IP address as "192.68.80.6:81".

- Version verification starts automatically to verify whether NVR**Remote** was installed. This process may take up to 30 seconds.
- When the software is completely downloaded and installed, the Login Screen is displayed.
- Enter username and password. The default username and password is **admin** and **1234**.

The following picture shows the display window of the NVR**Remote**:

Refer to the table below for brief description of functional items:

Item	Description	Item	Description
1	Instant Recording	**10**	Setup Menu
2	Deflicker On/Off at Playback	**11**	Search Event List
3	Smoothen the Image	**12**	Capture Snapshot
4	Audio On/Off	**13**	4:3 Viewing Aspect
5	2-way Audio Talk	**14**	HDD Health Status
6	Select Camera	**15**	Playback Control
7	Display Mode	**16**	Select Picture Size
8	View Live Camera	**17**	Bandwidth – Normal/Dual Stream
9	Playback Video	**18**	Download NVRPlayer

For more information on NVR**Remote**, see User's Manual.

NVRRemote Playback

Playback Remote Video:

- Click <**Play**> on the main window toolbar, and then <**Remote Playback**> tab.
- The <**From**> and <**To**> on top of the screen display the date and time from which recorded video is available for playback.
- Choose <**Playback**> in <**Select**> field for playback recorded video.
- Select the date and time of the segment to play back from the <**Start**> field. Users can change the date and time either by typing desired numbers directly or using the arrow buttons.
- Click <**OK**> to start the playback, or click <**Close**> to abort.

Playback Local *.drv File:

- Click <**Play**> on the main window toolbar, and then <**Local Playback**> tab.
- Click <**Open**> and the file selection screen is displayed. Select the *.drv video file to playback and click <**OK**>.
- Click <**OK**> to start the playback, or click <**Cancel**> to abort.
- View the video playback using the Playback controls.
- To end the playback, click <**Live**> to return to live video.

Playback Local *.avi Files:

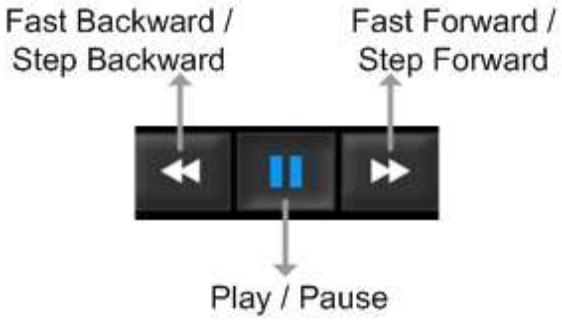
- Start the windows media player or other media player from <**Start**> menu (or any other possible access).
- Select <**File**> and then <**Open**>.
- Select the wanted *.avi file, and click <**Open**>.

NOTE: The *.avi files for each channel are stored separately. Therefore the video can be played back in single channel, full screen mode only.

Playback Event Video:

- Click **SEARCH** on the main window toolbar. The Event List appears.
- Scroll through the Event List and highlight the interested events.
- Double-click on the desired event to view the event video.

Playback Controls:



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